Madroño, Vol. 62, No. 4, p. 185, 2015

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INTRODUCTION

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California is one of the bryological hot spots of North America. Currently, the California bryoflora consists of approximately 800 species (650 mosses; 160 liverworts/hornworts). The California Floristic Province (CFP) portion of the state is influenced by a Mediterranean climate, and therefore, the California bryoflora has affinities with other regions of the world with a similar climate of wet winters and hot, dry summers. Many bryophytes documented for California are currently known from only a few collections, and large areas of the state have not been adequately explored. As more of California is systematically sampled for bryophytes, additional taxa will be determined to represent first records for the state, first records for North America, or described as species new to science. The pace of discovery of bryophyte species, understanding of distributions, and advancement of ecology is far behind that of the California vascular flora, due primarily to fewer field bryologists. Nonetheless, efforts like the three bryofloras presented here continue to advance our understanding of bryophytes in California and the role this refined awareness will contribute toward long-term conservation. The nature of bryophyte distributions in California is generally one of widely spaced occurrences with many species confined to specific microhabitats. Rare and uncommon bryophytes in California often occur in isolated, small populations disjunct from the center of their range. Some California bryophytes are likely to be viewed as relictual taxa confined to narrow and isolated microhabitats while others are considered to represent Pacific Slope endemics.

This issue of *Madroño* offers three examples of the importance of conducting localized bryofloras. The focus of each bryoflora is on a different land unit type. Carter covers the combined southern and northern Channel Islands off the southern California coast that are within multiple counties and other jurisdictions, Toren uses a county boundary (Lake) within an area of the northern Coast Ranges, and Dillingham inventories a national forest at the juncture of the southern Cascades and northern Sierra Nevada. These bryofloras are geographically separated and describe bryophyte communities based on differences on vegetation types ranging from coastal scrub and chaparral to montane coniferous forests. In addition, these bryofloras cover a very small geographic portion of the CFP and each offers much information on species distributions and habitat preferences. An important message that each of these bryofloras presents is that many species are rare on the landscape within the unit studied, and therefore, the probability of localized extirpations can be relatively high. These bryofloras share another attribute; they each contain a large percentage of the state's bryoflora in a remarkably small geographic area. In comparison, where could we find nearly 30 to 40 percent of the vascular flora of the state on one percent (or less) of the landscape?

Bryophytes offer many inventory challenges since they are generally small plants and most of the diagnostic features used to separate species require greater magnification than offered with a hand-lens or dissecting microscope. Nonetheless, with practice and experience, one can learn and recognize common and widespread bryophytes in the field. However, the importance and value of properly prepared bryophyte voucher specimens deposited in California herbaria cannot be overstated. Collections are paramount to document the California bryoflora. Some California bryophytes are known from a single occurrence and the next documented occurrence may be thousands of miles away, and in a few cases, even occur on a different continent. This is why the development of localized bryofloras across California is so important. The botanist working at a watershed, mountain range, or administrative unit can survey an area more systematically and locate as many unusual microhabitats across the landscape as possible. Careful collection will ensure new discoveries. Due to the nature of bryophyte establishment by spores or small plant fragments, there is a high potential to encounter species that arrived millennia ago in California and are just waiting to be discovered. It is also exceedingly hard to predict which species could occur in California.

I hope these three bryofloras will encourage other botanists to take up the challenge and inventory one of their favorite landscapes. Working on a bryoflora is indeed a time-consuming research endeavor, but well worth doing because many wonderful discoveries will be made along the way. We are fortunate to have these three new bryofloras that contribute to our understanding of the California bryoflora.